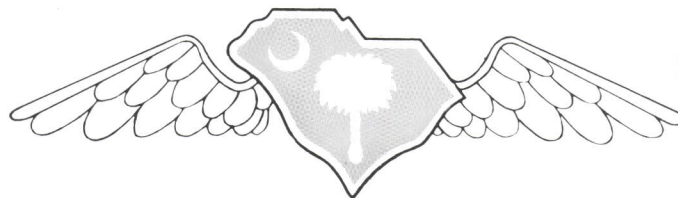


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# South Carolina Aeronautics Commission



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STATE DOCUMENTS

# Aviation Newsletter

VOLUME 29

JULY, 1979

NUMBER 7

## John F. Barry Retires From Agency

### Deputy Director For 20 Years

*Related story, Page 3*

John F. Barry, deputy director of the South Carolina Aeronautics Commission for the past 20 years, has retired from his job effective July 1.

Jack, as he is known to thousands of fellow aviators, has formally ended a career that spanned 39 years, but he isn't likely to go home and take to his easy chair.

"I'll be looking for something that is challenging and a lot of fun," he said.

Jack learned to fly in 1940 in the Civilian Pilot Training Program when he was a student at Wofford College and worked part time while in college as a flight instructor.

During the war, he was an aircraft commander on North African, Middle East ATC routes and New York, New England area in C-47 and C-46 aircraft.

After the war, he was band director and teacher at Union High School and then assistant principal and band director. Prior to joining the Aeronautics Commission, he was band director at Eau Claire High School and Heyward Gibbs Junior High School in Columbia.

Jack joined the commission in 1957 as flight inspector in charge of aircraft

registration, accident investigation and pilot registration.

In 1958, he was named director of aviation education for the commission, a position in which he was able to effectively combine his knowledge of aviation and education. His duties included talks to civic clubs and public schools, conducting pilot clinics throughout the state, conducting an annual workshop for public school teachers and writing the monthly Aviation Newsletter.

In 1959, he was named assistant to the director, a title which was changed to deputy director in 1972.

Jack holds an Airline Transport Rating and a commercial helicopter rating. He holds instructor ratings for airplane, rotocraft, instrument and advanced ground school. He has amassed over 8,000 hours during his flying career, including 4,505 in multi-engine aircraft. He has been an instructor on AOPA flight training programs since 1962 and received a meritorious award from AOPA in 1965.

He is a former battalion commander, 151st Signal Battalion, S.C. National Guard and is currently a member of the Fighting 246th Army Band, SCARNG.



**JACK BARRY**  
Retiree



## SOUTH CAROLINA AERONAUTICS COMMISSION

Created in 1935 to foster air commerce within the state; to have supervision over aeronautical activities and facilities in the state; to promulgate and enforce rules and regulations regarding the licensing of airplanes and pilots and to cooperate in the establishment and operation of airports.

**Richard W. Riley**  
Governor

### Commissioners

Joseph Wilder, Chmn.	Barnwell
Ralph Schmidt, V. Chmn.	Greenville
Norris Thomas	Charleston
Thomas L. Gregory	Columbia
Michael L. Laughlin	Aiken
James T. Anderson	Chester
Fred G. Edwards	Hemingway

### Staff

John W. Hamilton	Director
Bill Goodwin	Editor

Offices at Columbia Metropolitan Airport  
Mailing address: P.O. Box 1769, Columbia,  
S.C. 29202

## Letters Policy

The Aviation Newsletter will publish letters of moderate length on subjects of aviation interest, comments by readers and questions of general interest.

Deadline for letters is the 20th of each month for inclusion in next month's issue. Letters should be addressed to: Newsletter Editor, S.C. Aeronautics Commission, P.O. Drawer 1987, Columbia, S.C. 29202.

## New Name Approved For Allegheny

The Civil Aeronautics Board (CAB) has approved an Allegheny Airlines request to change its name to USAir over the objections of United Airlines.

United claimed confusion would be created among travelers because of similarity in the names. The new name is designed to recognize Allegheny's change from local service to trunk carrier.

## LETTERS TO THE EDITOR

### Don't Just Look, Smell Fuel Too

Regarding *The Aviation Newsletter* for June, 1979 and the water problems with the Cessna 182. You stated that if the pilots involved in these accidents had drained their tanks properly and thoroughly, none of the accidents would probably have occurred. You then went on to tell us to slosh the tanks, and then drain the fuel into a clear container so any water or foreign matter can be easily seen. Of course this is the basic procedure that most everyone is taught the first time out with an instructor, at least for me anyway.

However, Mr. Fred Beggy, my ground school instructor at Midlands Aviation in Owens Field several years ago, gave some wise advice to our class that could have saved the lives of the pilots in the fatal 182's. After draining the fuel sumps into a clear container, visually inspect for water and trash, but then smell the liquid in the container to make sure that you did not drain all water. Since fuel and water are pretty close to the same color it would be quite easy for a pilot to think he has drained all fuel when in fact he may have all water.

This could easily have been the case of the 182 that crashed May 17th where over a quart of water was found in the tanks. Had the pilot drained the sumps into a clear container he would not have seen a water bubble in the bottom of the container as is usually found when there is a small amount of water in the tanks. I feel this one extra step of smelling for fuel is just as important as looking for water in the container and these accidents have reaffirmed my belief.

Clayton E. Tapp, Jr.  
James L. Tapp Co.  
Columbia, S.C.

### A Bad Experience With C-182 Caps

I just received your June, 1979 Newsletter and the front page item gave me a shock. This happened to me and,

even though I never mentioned it to a Cessna dealer or the FAA, you might want to pass it along. The filler caps were beginning to show rust and I was expecting this to happen. I drained and drained water out of the tanks and then drained some more.

While flying high around our local airport, I lost an engine due to this water but made it safely back dead stick to the field. What I found out later after draining all three drains, was that I took the carb drain plug out and got eight or nine ounces of water. Anyway, for what its worth, Cessna 182 caps are bad. I had mine replaced shortly thereafter.

Thomas M. Eutsler  
Registered pharmacist  
Marion, N.C.

## Propeller Accidents

A review of National Transportation Safety Board (NTSB) propeller and rotor accidents for the years, 1975, 1976, and 1977 showed a total of 46. Of those, two were the result of helicopter rotors which caused two serious injuries. The 44 propeller accidents caused 14 fatalities and 30 serious injuries.

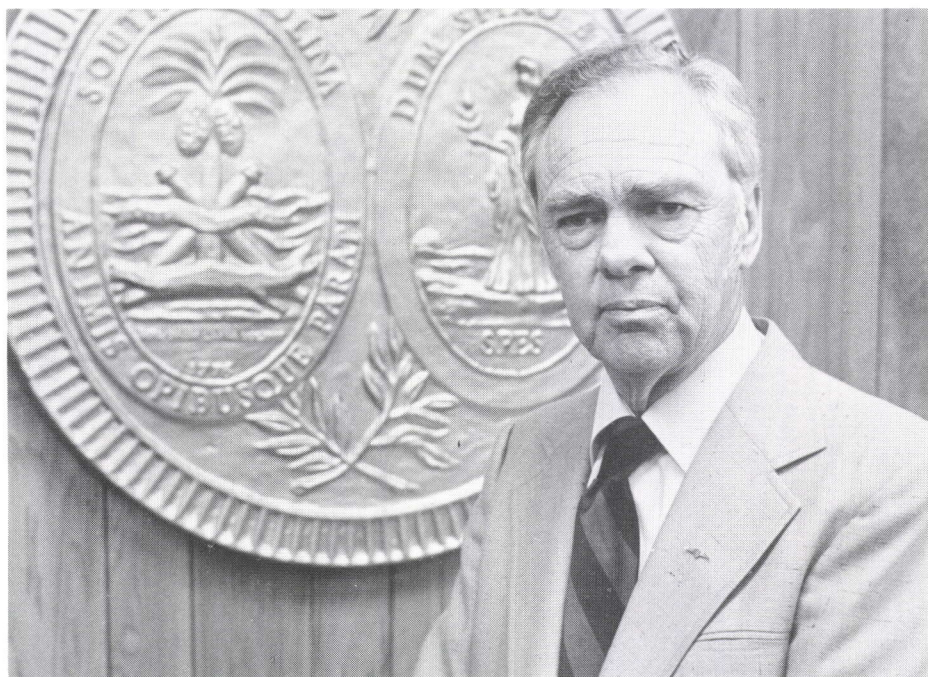
The table below gives breakdown:

Cause	Fatalities	Serious injuries
Passenger deplaning aircraft with operating engine	7	8
Passengers enplaning aircraft with operating engine	1	1
Handcranking of propellers by pilot	3	4
Handcranking of propellers by passenger	0	2
Pilot working on aircraft with engine running	0	5
Passengers assisting pilot taxiing and parking	2	5
Bystanders in vicinity of operating acft.	1	2
Ground personnel working near aircraft with operating engine	0	4
Propeller blade separation	0	1



## Re-elected Chairman

Joseph Wilder, a Barnwell radio station owner, was re-elected chairman of the South Carolina Aeronautics Commission during a commission meeting in Columbia June 20. Ralph Schmidt, a Greenville businessman, was re-elected vice-chairman at the meeting. Both terms are for one year. The seven-member commission consists of members appointed by the governor from each Congressional district plus one at-large member. (Aeronautics Commission photo).



## Commision is Reorganized

### Three Named Assistants to The Director

With the retirement of Jack Barry, the Commission announced several key personnel changes in a reorganization designed to better reflect the agency's actual operations.

The commission elected not to fill Barry's position at this time, but rather created three new positions, each of which will implement policy in three major areas.

Alan Alexander, a 31-year-old native of New Ellington, was named assistant to

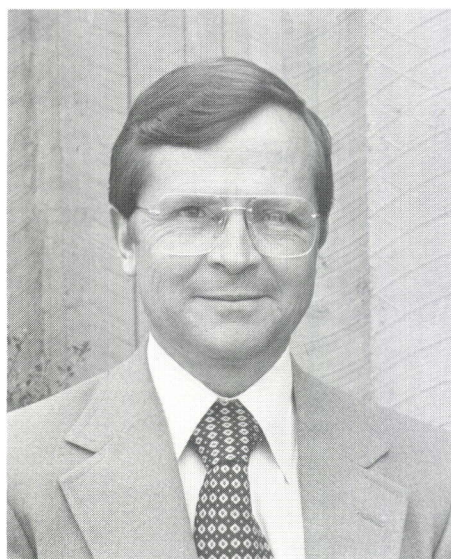
the director for administration and programs. He will primarily be responsible for administration, accounting, personnel, aircraft registration, aerial application and central purchasing. Alexander has been with the commission two and a half years as a planner.

Charles B. Smoak, 48, an 11-year veteran with the commission and former chief pilot, was named assistant to the director for flight operations. He will be responsible for the commission's flight

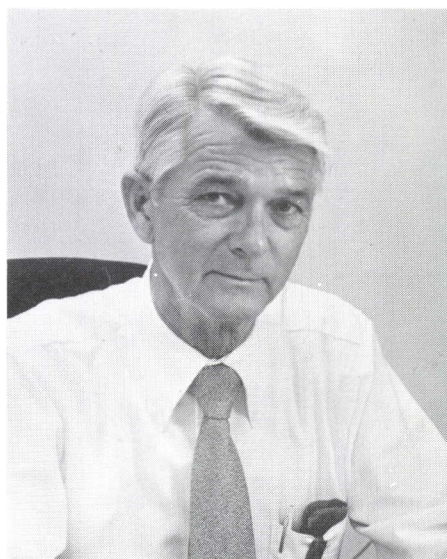
department, aircraft maintenance and scheduling and flight clinics and competitions.

Dan Fraley was named assistant to the director for airport development. He will be responsible for the agency's capital improvement program, airport planning, maintenance and inspection and airspace coordination.

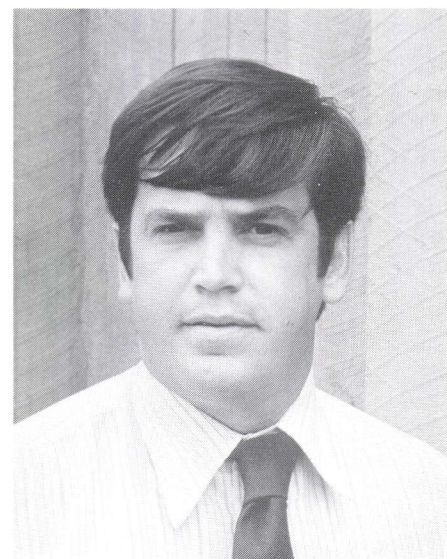
John W. Hamilton continues as the agency's director.



**CHARLES B. SMOAK**  
Flight Operations



**DAN FRALEY**  
Airport Development



**ALAN W. ALEXANDER**  
Administration



# New Commuter Airline Serves Carolinas

A new commuter airline, Atlantis, now provides regularly scheduled service between seven points in the two Carolinas and Tennessee.

Atlantis was incorporated Nov. 15, 1978 and started carrying passengers April 10. It began service to Columbia June 7. The airline presently flies three 20-passenger de Havilland Twin Otters and has a

fourth on order.

President Robert F. Wigmore said the Otter, a STOL aircraft which can land in only 500 feet, has earned a reputation that is unsurpassed in its field for short haul transportation.

Wigmore said the airline will provide Columbia with direct service to Charlotte, Fayetteville, Greensboro, Hilton Head

and Myrtle Beach. In addition, direct connections on Atlantis are available for Tri Cities, Tenn. via Charlotte.

The company is based in Myrtle Beach and is governed by a 13 member board of directors. Chairman of the Board is William McGee Morrison.



**Atlantis' Twin Otter Outside Myrtle Beach Terminal**

## FBO's Asked to Report Airport Fuel Shortages

The state's Fixed Base Operators (FBO's) are being asked by the Flight Service Stations in their area to make reports of any fuel shortages they experience.

The FSS and local towers will, in turn, forward the reports to the FAA Southern Region office in Atlanta, which will send them on to the Office of Energy Transportation Coordinator in Washington.

Carl Nowak, Chief of the Florence FSS has sent a letter to all the airports in the Florence flight plan area advising them of the reports.

Nowak asks the FBO's to call only if they are experiencing a fuel shortage. Weekend and holiday reports are not required unless critical shortages occur,

he said.

The reports should indicate whether or not your airport is experiencing shortages of aviation jet fuel and/or aviation gasoline.

"I think the FBO or the airport manager is going to have to make the decision whether they have a fuel shortage or not," Nowak said.

"If you are allocated so much and it's already gone and you know you are not getting any more, that would be a shortage," he said.

Nowak asks the operators to call in reports of shortages between 1 and 3 p.m., a time during which most FBO will have a lull period.

## AOPA Ground Schools Set July 27-29 in Columbia

Three AOPA ground schools, designed to help airmen pass the FAA written examinations, will be held in Columbia July 27-29 at the Quality Inn Motel, 1029 Briargate Circle.

The following courses will be offered:

**Private/Commercial exam course — 8 a.m. — \$135**

**Instrument rating / Instrument Flight Instructor — 8 a.m. — \$155**

**Updater course (July 28 only) — 8:30 a.m. — \$45**

After sitting through the ground school, you can go ahead and take the FAA test, since FAA examiners are normally available to give the exams on location the fourth day.

To make reservations for the courses or for further information, call toll free at 800/638-0853.



## Bankair's New Building

Bankair, one of the first commuter airlines to begin operating in the state, has moved into new larger quarters at the Columbia Metropolitan Airport. The building, shown in the background, has a passenger waiting room, dispatch office, as well as offices for executive and accounting personnel and a large maintenance hanger. The airline's Piper Cherokees and Senecas will all soon be displaying the company's logo shown on the Cherokee tail in the foreground (Aeronautics Commission photo).



## Attend One Breakfast Club Meeting And You're A Member For Life

Want a good meal and lively conversation with fellow aviators on a Sunday morning? Then plan to attend the next South Carolina Breakfast Club meeting.

The S.C. Breakfast Club had its first meeting in Orangeburg in 1938. The early members, brought together by a love for flying, fellowship, food and fun, formed some very loose rules that have proven easy to live with.

It was agreed that there would be no charter, no by-laws, no dues, no membership list and no one would be refused membership. Anyone who attends one meeting automatically becomes a lifetime member. The verbal rules set up in that first meeting are still being passed along by older members and officers.

The club accepts, by invitation, the meeting place. Whoever wants to invite the club may do so. This could mean a group, an airport, a city or an individual who will accept responsibility of providing transportation to and from a place to have a breakfast meal.

Members pay for their meals unless offered free. Sometimes meals are prepared at the airports, or are catered into

the airport. Members have been treated to everything from bar-b-que to steaks and seafood to the more ordinary egg, grits and bacon.

It is also a rule of the club to meet every other Sunday morning with arrivals before 9:30 a.m., breakfast at 10 and departures at 11 a.m.

The club holds an annual meeting during the last meeting in October, preferably in Orangeburg, for the election of officers.

Bill Hawkins, manager of the Camden Airport is president of the club. There are three vice presidents, each representing the upper part of the state, the midlands and the low country, and a secretary-treasurer and historian. The members present at election day speak for the entire membership.

The group is one of the oldest clubs of its type in the United States and has had continuous meetings except for a short time during World War II. The club has an incomparable safety record, with many thousands of hours flown to and from meetings safely with no accidents.

The following meeting dates are

scheduled:

July 15	Georgetown
July 29	Spartanburg
Aug. 12	Gastonia, N.C.
Aug. 26	Open
Sept. 9	Winnsboro
Sept. 23	Greenville

Anyone who would like to host the Aug. 26 meeting, please call Anne Hawkins, club secretary at the Camden airport.

## Misuse of Flaps Caused 150 Crash at Owens Field

The National Transportation Safety Board (NTSB) blamed misuse of flaps and failure to maintain flying speed for the crash of a Cessna 150 L at Owens Field June 12, 1979.

The Cessna stalled on initial climbout from runway 07 and crashed after taking off with full flaps.

The pilot was seriously injured and the aircraft was destroyed. The private pilot, 38, had 70 total hours, all in type.



# McDonnell Official: No Design Flaws in DC-10

A McDonnell Douglas official has defended the DC-10 and told Congress that there are no design flaws that could have caused the May 25 American Airlines crash in Chicago that killed 274 people.

John Brizendine, president of Douglas Aircraft Co., testified before two House Public Works and Transportation subcommittees June 19.

He told the subcommittees that the pylon structure, the hydraulic and control systems, as well as other sections of the DC-10 "have been put under the microscope literally and figuratively, and always the results have been the same: No design flaws that might have caused the Chicago accident have been found."

In explaining why McDonnell Douglas originally voluntarily called for DC-10 groundings on May 29, Brizendine said the company felt detailed inspections should be performed to assure that there was no question of pylon integrity.

"We have subsequently determined that web cracks which were found during initial inspections were not related to the Chicago accident," he said.

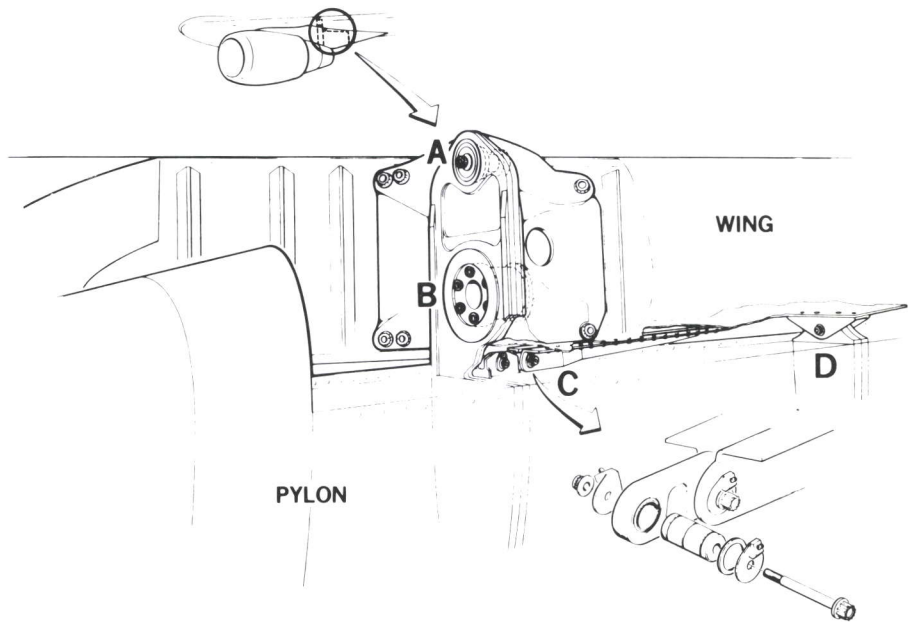
Earlier, Congress learned that both remaining hydraulic systems on the aircraft were operating up to the time of impact, but a hydraulic line break in the left wing apparently allowed the leading edge slats to retract.

James King, chairman of the National Transportation Safety Board (NTSB), told the House Government Operations subcommittee that the left wing's outboard slats were retracted and the right wing and left inboard slats were extended when the aircraft impacted.

Slats are high lift devices on the wing leading edge deployed during takeoff and landing to allow operation at slower airspeeds. It is thought that the loss of hydraulic pressure outboard of the number one engine that dropped off allowed the slats to retract, reducing left wing lift. The resulting asymmetrical lift rolled the aircraft to the left at a rate that full deflection of the ailerons was unable to counter.

The number one hydraulic system

## DC-10 WING/PYLON STRUCTURE



**DC-10 PYLON ATTACHMENT** — McDonnell Douglas sketch shows how the engine pylon is joined to the wing of the DC-10. Fifteen attachments are used at four points. A and B are large high-strength forged bearing inserts holding the pylon forward support bulkhead of double steel plates to a large titanium forging mounted on the front main spar of the wing. The upper attachment fitting, A, is 4 inches in diameter, with a 7/8 inch steel bolt for backup (two attachments). The lower fitting, B, is 6 1/4 inches in diameter, with 9/16 inch steel bolts (seven attachments). C is the thrust link, a fitting 8 1/2 inches long and approximately 15/16 inch thick, with a "monoball" steel bearing, a 1 1/4 inch bushing of hardened steel and a 1/2 inch steel bolt at each end (four attachments). It joins the pylon to the lower wing surface. D connects the double plate aft support bulkhead to a titanium clevis on the underside of the wing, with a monoball bearing and a 1 3/8 inch steel bushing and a 1 inch bolt as backup (two attachments). A, B and D carry vertical and side loads imposed on the engine and pylon into the main structure of the wing; C takes thrust loads from the engine into the wing. At each of the four attach points, loads are transferred through the joint by the bearing and the large insert or bushing, which passes through both sides of the joint. The bushings are held in place by the high strength steel bolts, as shown in the typical assembly view at lower right.

failed when the engine left the aircraft, taking the number one system pumps with it, King said. While the remaining pumps continued to operate normally, the hydraulic lines and slat follow-up cables to the outboard section of the leading edge slats on the left wing were probably severed, he said.

A DC-10 hydraulics expert told the subcommittee that once the leading edge slats are positioned by cable action, they are held in position by hydraulic pressure.

If both the hydraulic pressure and slat follow-up cables to the outboard section were lost, the slats would retract, he said.

NASA has completed wind tunnel tests for the NTSB of a DC-10 wing without the engine and with various combinations of leading edge slats, King said. The information is being fed to the DC-10 engineering simulator at Long Beach for testing of the aircraft's performance characteristics.

## DC-10 LAW SUITS FILED TOTAL NEARLY \$2 BILLION

Law suits for close to \$2 billion have been filed by the families of four who died in the Chicago DC-10 accident. In New York State Supreme Court, American Airlines and McDonnell Douglas were sued for \$1 billion by a woman who lost her son and daughter-in-law. Her attorneys said the FAA may also be sued on inspection procedures.

In Los Angeles, three law suits totaling

\$835 million were filed. Two charged negligence in the aircraft's manufacture, one claimed improper construction. In the latter suit, General Electric is also named.

The largest suit, for \$810 million, was instituted by the parent of a 19-year-old killed in the accident. It is projected as a class action on behalf of relatives of all crash victims.





## Buck Moss Honored

Buck Moss, right, receives a plaque from Bill Hope, left, honoring him for 47 years of aviation service to the State and Spartanburg County. Moss and Ben F. Johnson were honored for their service during the annual aviation safety week awards banquet in Greenville.

## FAA To Offer Written Exams At Greenville, Charleston

The FAA will have two persons at the Greenville Downtown Airport and Charleston AFB during July, August and September to administer written exams for those who wish to take them.

Space is limited to 25 persons, so those persons wishing to take an exam in Greenville or Charleston should notify the Columbia General Aviation District Office (GADO) by noon on Tuesday before the Wednesday schedule.

FAA personnel will be at the two airports between 9:30 a.m. and 3:30 p.m. on the following dates:

	July	August	September
Greenville Air, Greenville Downtown Airport terminal building	11	8	12
Charleston AFB, building 113	18	15	19

Applicants for ATP, flight engineer, military competence, and mechanic examinations must have their qualification checked by a general aviation inspector prior to taking the written examination. If qualified, those applicants will be issued an authorization for written test to be presented when taking the examination.

The Columbia district office will schedule a special written test itinerary to any location where there are 15 or more applicants, if prior arrangement is made.

## Columbia's Instrument Runway To Close For Six Days Aug. 6

Runway 11-29 at Columbia Metropolitan Airport will be closed for six days beginning Monday, Aug. 6 to receive a new seven-inch thick asphalt surface.

Airport Director Robert H. Waddle, said the project will strengthen the pavement to assure continued stability with current large jet aircraft loads.

Low bidder on the project was Sloan Construction Co. of Greenville at \$2.88 million.

Delta Airlines will temporarily use Bush Field in Augusta while the long instrument runway is closed at Columbia. Eastern and Piedmont will announce plans to serve the community during the closing soon.

Two commuter airlines, Bankair and Atlantis will continue to provide flights to and from the airport using the shorter runway 5-23. General Aviation aircraft will also use that runway.

## Radio Station Proposes 1,000-Foot Tower Near Laurens Airport

A 1,056 foot tower has been proposed near Gray Court for Laurens radio station WGXL.

According to preliminary FAA review, the tower would exceed FAR 77.23 (a)(1) (height in excess of 500 feet above site level) and FAR 77.23 (a)(3) by 400 feet (Greer approach control radar minimum vectoring altitude increase 2,500 to 2,900 within 3 NM of the tower).

The tower will be located 11 miles northwest of Laurens Airport at latitude 34 degrees, 36 minutes, 36 seconds and latitude 82 degrees, 08 minutes and 08 seconds.

Comments pertaining to the tower's effect on aircraft operations in the area may be made by interested persons to the FAA Southern Region Office in Atlanta. Comments should be received by July 12.

## Union Council Okays Funds For NDB

Union County Council has approved \$3,000 to help pay for a non-directional beacon at the Union Airport.

The NDB will cost \$7,000, half of which will be funded by the S.C. Aeronautics Commission. The Union Airport will fund the remaining \$500.

Union County will soon join 28 other airports in the state with the radio beacons, most of which have been funded on a 50 percent matching basis by the State Aeronautics Commission.





## Looking For Escapees

The S.C. Aeronautics Commission frequently uses its UH-1B (Huey) and Bell 206B Jetranger helicopters to fly support mission for law enforcement personnel. Here, Commission pilot H. Flowe Trexler and a SLED agent look for three escapees near Barnwell June 25. The three men escaped from a state correctional facility in Greenville the day before. They were captured in the woods near a farmhouse shortly before dusk. Police officers say the helicopter is a tremendous psychological deterrent and frequently is the only thing that keeps a criminal from running (Aeronautics Commission Photo).

## Flight Plans Markedly Reduce Location Time

All of us have been tempted to forget about filing a flight plan, particularly if we are only going a short distance, but data from the Air Force Rescue Coordination Center (AFRCC) should make us realize a flight plan can spell the difference between life and death if we run into trouble, even on a short flight.

Air Force statistics show the time it takes to locate a downed aircraft was markedly reduced when a flight plan was filed (from nearly four days to a little more than 38 hours with a VFR flight plan) and survivability rate was increased by 16 percent for those flights which were on flight plans.

The Air Force figures are given below:

### RESPONSE TIME VS TYPE OF FLIGHT PLAN

Type Flight plan	Time from LKP to notification	Time from LKP to location
IFR	43 min	9 hrs 8 min
VFR	5 hrs 21 min	38 hrs 17 min
No flight plan	32 hrs 29 min	3 days 21 hrs 52 min

### SURVIVABILITY VS FLIGHT PLAN

	IFR/VFR Flight Plan	No flight plan
Persons involved	682	532
Total survivors	261	115
Survival rate	38%	22%